

ABSTRACT

A sulphur-vulcanizable rubber composition which can be used for the manufacture of tires, comprising at least one diene elastomer, a reinforcing filler and a coupling agent providing the link between the reinforcing filler and the elastomer, in which the reinforcing filler comprises

5 a modified carbon black having the following characteristics:

- (i) it is coated at least in part with a layer of aluminium oxide and/or hydroxide;
- (ii) its specific BET surface area is between 30 and 400 m²/g;
- (iii) its average particle size (by mass), d_w , is between 20 and 400 nm;
- (iv) its disagglomeration rate, α , measured via the ultrasound disagglomeration test,

10 at 10% power of a 600-watt ultrasonic probe, is greater than $1 \times 10^{-3} \mu\text{m}^{-1}/\text{s}$.